



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : George P. Anderson et al. Art Unit : 1653
Serial No. : 09/811,824 Examiner : Chih Min Kam
Filed : March 20, 2001
Title : INORGANIC PARTICLE CONJUGATES

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REVOCATION AND NEW POWER OF ATTORNEY

Under 37 CFR §3.73(b), Massachusetts Institute of Technology, certifies that it is the assignee of 100% of the right, title and interest in the patent application identified above by virtue of:

☒ An assignment from the inventors of the patent application identified above, recorded at the Patent and Trademark Office on December 10, 2003, at reel/frame 014185/0803.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

The undersigned, acting on behalf of the assignee, hereby revokes all powers of attorney previously granted in the application and appoints:

Harold H. Fox	Reg. No. 41,498
Stuart T.F. Huang	Reg. No. 34,184
D. Douglas Price	Reg. No. 24,514
Charles F. Schill	Reg. No. 27,590
Scott D. Watkins	Reg. No. 36,715

of: STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, NW
Washington, DC 20036

with full power of substitution and revocation, to prosecute the application and to transact all business in the United States Patent and Trademark Office connected therewith.

Applicant : George P. Anderson et al.
Serial No. : 09/811,824
Filed : March 20, 2001
Page : 2 of 2

Attorney's Docket No.: 14952.0282 / MIT Case 8733

All correspondence regarding the application should be sent to:

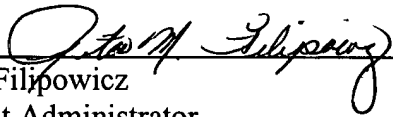
27890

PTO Customer Number

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

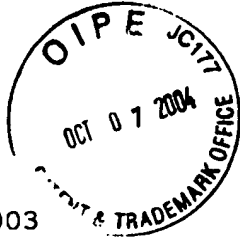
Respectfully submitted,

Date: 5/26/04



Rita Filipowicz
Patent Administrator
Massachusetts Institute of Technology

Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Telephone: 202-429-3000
Facsimile: 202-429-3902



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231



700056132A

DECEMBER 11, 2003

PTAS

FISH & RICHARDSON P.C.
HAROLD H. FOX
1425 K STREET, N.W.
11TH FLOOR
WASHINGTON, DC 20005-3500

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/10/2003

REEL/FRAME: 014185/0803
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BAWENDI, MOUNGI G.

DOC DATE: 12/08/2003

ASSIGNOR:

SUNDAR, VIKRAM C.

DOC DATE: 12/09/2003

ASSIGNEE:

MASSACHUSETTS INSTITUTE OF
TECHNOLOGY
77 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02142-1324

SERIAL NUMBER: 09811824
PATENT NUMBER:

FILING DATE: 03/20/2001
ISSUE DATE:

SERIAL NUMBER: 60190766
PATENT NUMBER:

FILING DATE: 03/20/2000
ISSUE DATE:

014185/0803 PAGE 2

TARA WASHINGTON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

12/10/2003
700056132

Substitute Form PTO-1585
Attorney Docket No.: 01997-282001
Client's Ref. No.: MIT Case 8733

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

Commissioner for Patents: Please record the attached original document(s) or copy(ies).

1. Name of conveying party(ies):

Moungi G. Bawendi, and Vikram C. Sundar

Additional name(s) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, Massachusetts 02142-1324
United States of America

Additional names/addresses attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment
☐ Merger
☐ Security Agreement
☐ Change of Name
☐ Other:

Execution Date: 12/08/2003; 12/09/2003

4. Application number(s) or patent number(s):

If this document is being filed with a new application, the execution date of the application is:

A. Patent Application No(s):

09/811,824 and 60/190,766

B. Patent No(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name/address of party to whom correspondence concerning document should be mailed:

HAROLD H. FOX
Fish & Richardson P.C.
1425 K Street, N.W.
11th Floor
Washington, DC 20005-3500

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR §3.41): \$40

- ☐ Enclosed
☒ Authorized to charge Deposit Account.

8. Deposit Account No.: 08-1050

Please apply any additional charges, or any credits, to our
Deposit Account No. 08-1050.

DO NOT USE THIS SPACE

9. Statement and Signature: *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Harold H. Fox
Reg. No. 41,498

Name of Person Signing

Signature

Date

Total number of pages including coversheet, attachments and document: 4

ASSIGNMENT

For valuable consideration, we MOUNGI G. BAWENDI of Boston, MA and VIKRAM C. SUNDAR of Hoboken, NJ, hereby assign to Massachusetts Institute of Technology, a corporation of Massachusetts; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent, entitled INORGANIC CHROMOPHORE BIOCONJUGATES, filed March 20, 2000, and assigned U.S. Serial Number 60/190,766, and an application for United States Patent signed by us entitled INORGANIC PARTICLE CONJUGATES, filed March 20, 2001, and assigned U.S. Serial Number 09/811,824, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

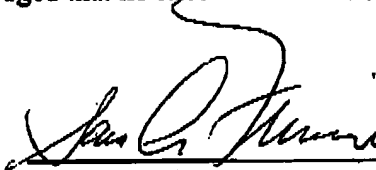
IN WITNESS WHEREOF, I hereto set my hand and seal at Cambridge,
this 8th day of December, 2003
My Bawendi L.S.
MOUNGI G. BAWENDI

State of Massachusetts :

: ss.

County of Middlesex :

Before me this 8th day of December, 2003, personally
appeared MOUNGI G. BAWENDI known to me to be the person whose name is subscribed to
the foregoing Assignment and acknowledged that he executed the same as his free act and deed
for the purposes therein contained.



Notary Public

My Commission Expires: March 14, 2008



IN WITNESS WHEREOF, I hereto set my hand and seal at Yoktown Heights,
this 09 day of December, 2003
VIKRAM C. SUNDAR L.S.

State of New York :
: ss.

County of Westchester :

Before me this 9th day of December, 2003, personally
appeared VIKRAM C. SUNDAR known to me to be the person whose name is subscribed to the
foregoing Assignment and acknowledged that he executed the same as his free act and deed for
the purposes therein contained.

Robin Louise Moro
Notary Public

My Commission Expires: 7/17/2006

[Notary's Seal Here]

Robin Louise Moro
Notary Public, State of NY
No. 01D16045019
County of Westchester
Commission Expires July 17, 2006

40191690.doc



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : George P. Anderson et al. Art Unit : 1653
Serial No. : 09/811,824 Examiner : Chih Min Kam
Filed : March 20, 2001
Title : INORGANIC PARTICLE CONJUGATES

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REVOCATION AND NEW POWER OF ATTORNEY

Under 37 CFR §3.73(b), The United States of America as represented by the Secretary of the Navy, certifies that it is the assignee of right, title and interest in the patent application identified above by virtue of:

☒ An assignment from inventors of the patent application identified above, recorded at the Patent and Trademark Office on December 10, 2003, at reel/frame 014185/0908.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

The undersigned, acting on behalf of the assignee, hereby revokes all powers of attorney previously granted in the application and appoints:

Harold H. Fox	Reg. No. 41,498
Stuart T.F. Huang	Reg. No. 34,184
D. Douglas Price	Reg. No. 24,514
Charles F. Schill	Reg. No. 27,590
Scott D. Watkins	Reg. No. 36,715

of: STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, NW
Washington, DC 20036

with full power of substitution and revocation, to prosecute the application and to transact all business in the United States Patent and Trademark Office connected therewith.

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Serial No. : 09/811,824
Filed : March 20, 2001
Page : 2 of 2

Attorney's Docket No.: 14952.0282 / MIT Case 8733

All correspondence regarding the application should be sent to:

27890

PTO Customer Number

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 8/2/04

Signed: [Signature]

Printed Name: Don Krasak

Title: Assoc. Counsel, J.P.
Naval Research Laboratory

Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Telephone: 202-429-3000
Facsimile: 202-429-3902



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231



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DECEMBER 11, 2003

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HAROLD H. FOX
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WASHINGTON, DC 20005-3500

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RECORDATION DATE: 12/10/2003

REEL/FRAME: 014185/0908
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
MATTOUSSI, HEDI

DOC DATE: 12/08/2003

ASSIGNOR:
ANDERSON, GEORGE P.

DOC DATE: 12/08/2003

ASSIGNOR:
MAURO, J. MATTHEW

DOC DATE: 12/08/2003

ASSIGNEE:
UNITED STATES OF AMERICA AS
REPRESENTED BY THE SECRETARY OF
THE NAVY, THE
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

014185/0908 PAGE 2


SERIAL NUMBER: 09811824
PATENT NUMBER:FILING DATE: 03/20/2001
ISSUE DATE:SERIAL NUMBER: 60190766
PATENT NUMBER:FILING DATE: 03/20/2000
ISSUE DATE:STEVEN POST, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

12/10/2003
700056134

Substitute Form PTO-1595
Attorney Docket No.: 01997-282001
Client's Ref. No.: MIT Case 8733

RECORDATION FORM COVER SHEET
PATENTS ONLY

PIPE JC177
OCT 07 2004

Commissioner for Patents: Please record the attached original document(s) or copy(ies).	
1. Name of conveying party(ies): Hedi Mattoussi, George P. Anderson, and J. Matthew Mauro Additional name(s) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): The United States of America as represented by the Secretary of the Navy 1000 Navy Pentagon Washington, DC 20350-1000 Additional names/addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: Execution Date: 12/08/2003	
4. Application number(s) or patent number(s): If this document is being filed with a new application, the execution date of the application is: A. Patent Application No(s): 09/811,824 and 60/190,766 B. Patent No(s): Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name/address of party to whom correspondence concerning document should be mailed: HAROLD H. FOX Fish & Richardson P.C. 1425 K Street, N.W. 11th Floor Washington, DC 20005-3500	6. Total number of applications/patents involved: 1 7. Total fee (37 CFR §3.41): \$40 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to charge Deposit Account. 8. Deposit Account No.: 08-1050 Please apply any additional charges, or any credits, to our Deposit Account No. 08-1050.
DO NOT USE THIS SPACE	
9. Statement and Signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i>	
Harold H. Fox Reg. No. 41,498 Name of Person Signing	 Signature
	12-10-03 Date
Total number of pages including coversheet, attachments and document: 5	

CH \$80.00 061050 09811824

ASSIGNMENT

For valuable consideration, we, GEORGE P. ANDERSON of Lanham, MD, HEDI MATTOUSSI of Alexandria, VA, and J. MATTHEW MAURO of Silver Spring, MD, hereby assign to: The United States of America as represented by the Secretary of the Navy, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent, entitled INORGANIC CHROMOPHORE BIOCONJUGATES, filed March 20, 2000, and assigned U.S. Serial Number 60/190,766, and an application for United States Patent signed by us entitled INORGANIC PARTICLE CONJUGATES, filed March 20, 2001, and assigned U.S. Serial Number 09/811,824, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Naval Research Lab
this 8th day of December, 20 03
George P. Anderson L.S.
GEORGE P. ANDERSON

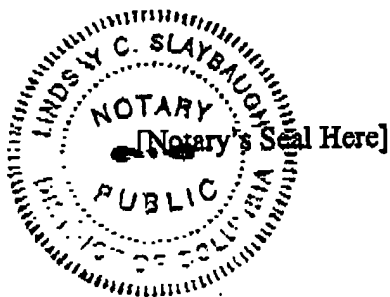
City of Washington
State of DC :
District of Columbia : SS.
County of DC :

Before me this 8th day of December, 20 03, personally
appeared GEORGE P. ANDERSON known to me to be the person whose name is subscribed to
the foregoing Assignment and acknowledged that he executed the same as his free act and deed
for the purposes therein contained.

[Signature]

Notary Public

My Commission Expires:



IN WITNESS WHEREOF, I hereto set my hand and seal at Novel Research Lab,
this 8th day of December, 20 03

HEDI MATTOUSSI L.S.

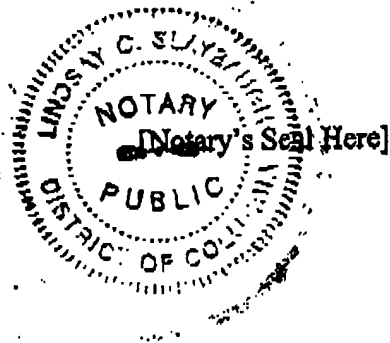
City of Washington
State of DC :

District of Columbia : ss.
County of DC :

Before me this 8th day of December, 20 03, personally
appeared HEDI MATTOUSSI known to me to be the person whose name is subscribed to the
foregoing Assignment and acknowledged that he executed the same as his free act and deed for
the purposes therein contained.

[Signature]
Notary Public

My Commission Expires:

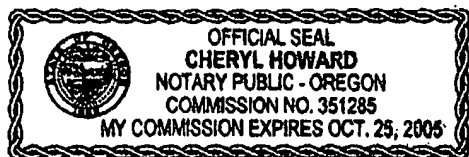


IN WITNESS WHEREOF, I hereto set my hand and seal at 8:55 A.M.,
this 8TH day of December, 2003
J. Matthew Mauro L.S.
J. MATTHEW MAURO

State of Oregon :
: ss.

County of Lane :

Before me this 8th day of December, 2003, personally
appeared J. MATTHEW MAURO known to me to be the person whose name is subscribed to
the foregoing Assignment and acknowledged that he executed the same as his free act and deed
for the purposes therein contained.



[Notary's Seal Here]

Cheryl Howard
Notary Public
My Commission Expires: Oct. 25, 2005